SK1020D~SK10200D

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE	20 to 200 Volts
CURRENT	10 Amperes

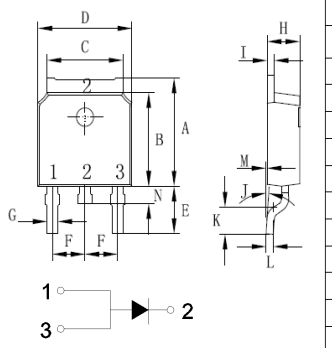
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For through hole applications
- Low profile package
- Built-in strain relief
- Low power loss, High efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Lead free in comply with EU RoHS

MECHANICALDATA

- Case: TO-252 molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: As marking

TO-252 (DPAK)



TO-252 (DPAK)
Unit:mm

DIM	MIN	MAX
A	6.85	7.25
B	5.90	6.30
C	5.13	5.53
D	6.40	6.80
E	2.90	3.30
F	2.19	2.39
G	0.45	0.85
H	2.20	2.40
I	0.41	0.61
J	0°	8°
K	1.45	1.85
L	0.41	0.61
M	0.00	0.12
N	0.60	1.00

MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

PARAMETER	SYMBOL	SK 1020D	SK 1040D	SK 1045D	SK 1050D	SK 1060D	SK 1080D	SK 10100D	SK 10150D	SK 10200D	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	28	31.5	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	45	50	60	80	100	150	200	V
Maximum Average Forward (See Figure 1)	$I_{F(AV)}$	10									A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	150									A
Maximum Forward Voltage at 10A per leg	V_F	0.55			0.70		0.85		0.90	0.92	V
Maximum DC Reverse Current at T_J=25°C Rated DC Blocking Voltag T_J=100°C	I_R	0.2 20									mA
Typical Thermal Resistance Note 1	$R_{\theta JC}$	25									°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150							-55 to +175		°C

Note 1: Mounted on FR-4 PCB Copper, minimum recommended pad layout

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

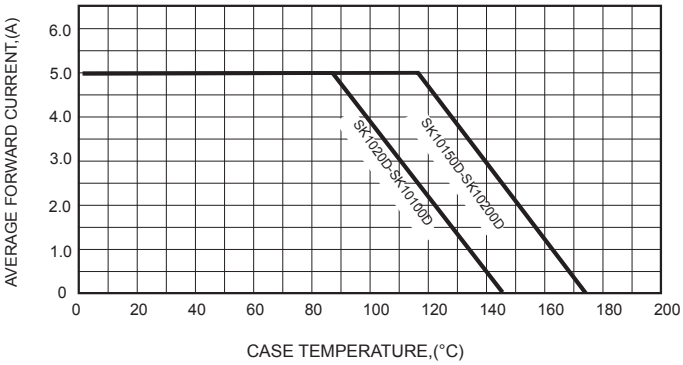


FIG.2-TYPICAL FORWARD CHARACTERISTICS

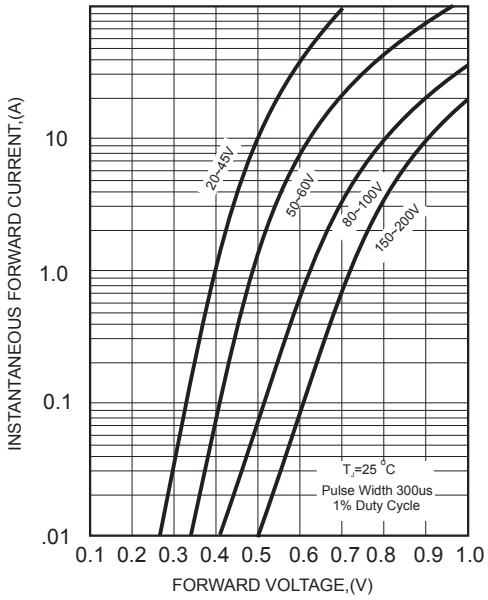


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

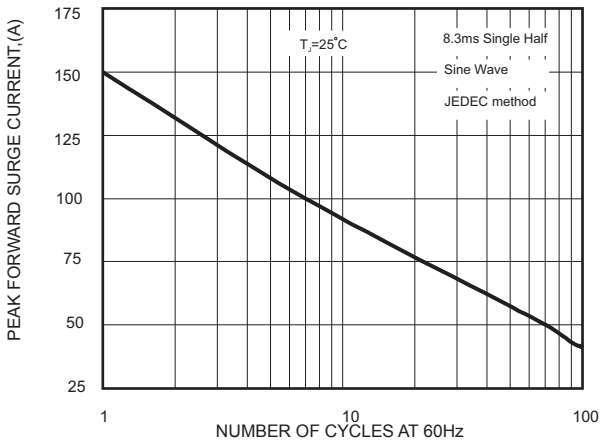
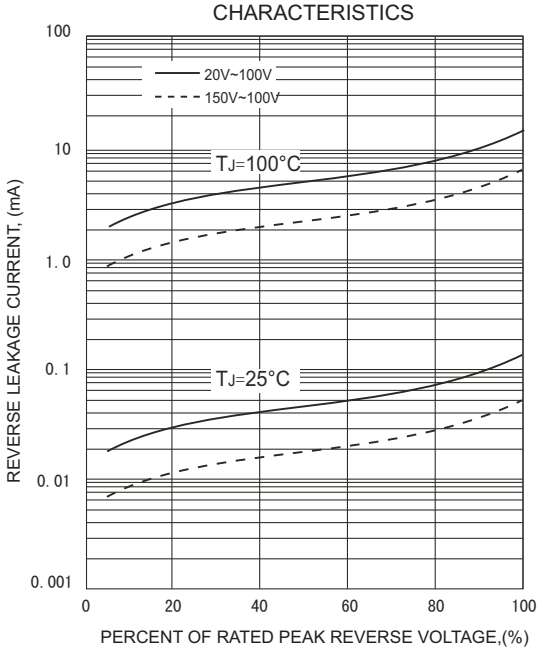


FIG.4- TYPICAL REVERSE CHARACTERISTICS



Important Notice and Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from DIYI.

- DIYI reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

- DIYI disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.

- DIYI does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications.
  DIYI makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.

- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify DIYI for any damages resulting from such improper use or sale.

- Since DIYI uses lot number as the tracking base, please provide the lot number for tracking when complaining.